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Best pitch award at the Nordic Innovation Fair in Copenhagen 2023

OrganAnalytics

Organ Transplant Quality Control

New Devices and Services for Research, Industry, and Healthcare

- Business Finland, Research to Business Grant, 795 k€, 1.8.2022 – 30.4.2024
- Novo Nordisk Foundation, Distinguished Innovator Grant, 4 MDKK, 1.5.2024 – 30.4.2026
- Spin-off planned for 2026

Jarno Tanskanen, Donna Kivirauma, and the Team

Computational Biophysics and Imaging Group

BioMediTech and Faculty of Medicine and Health Technology

Tampere University, Finland

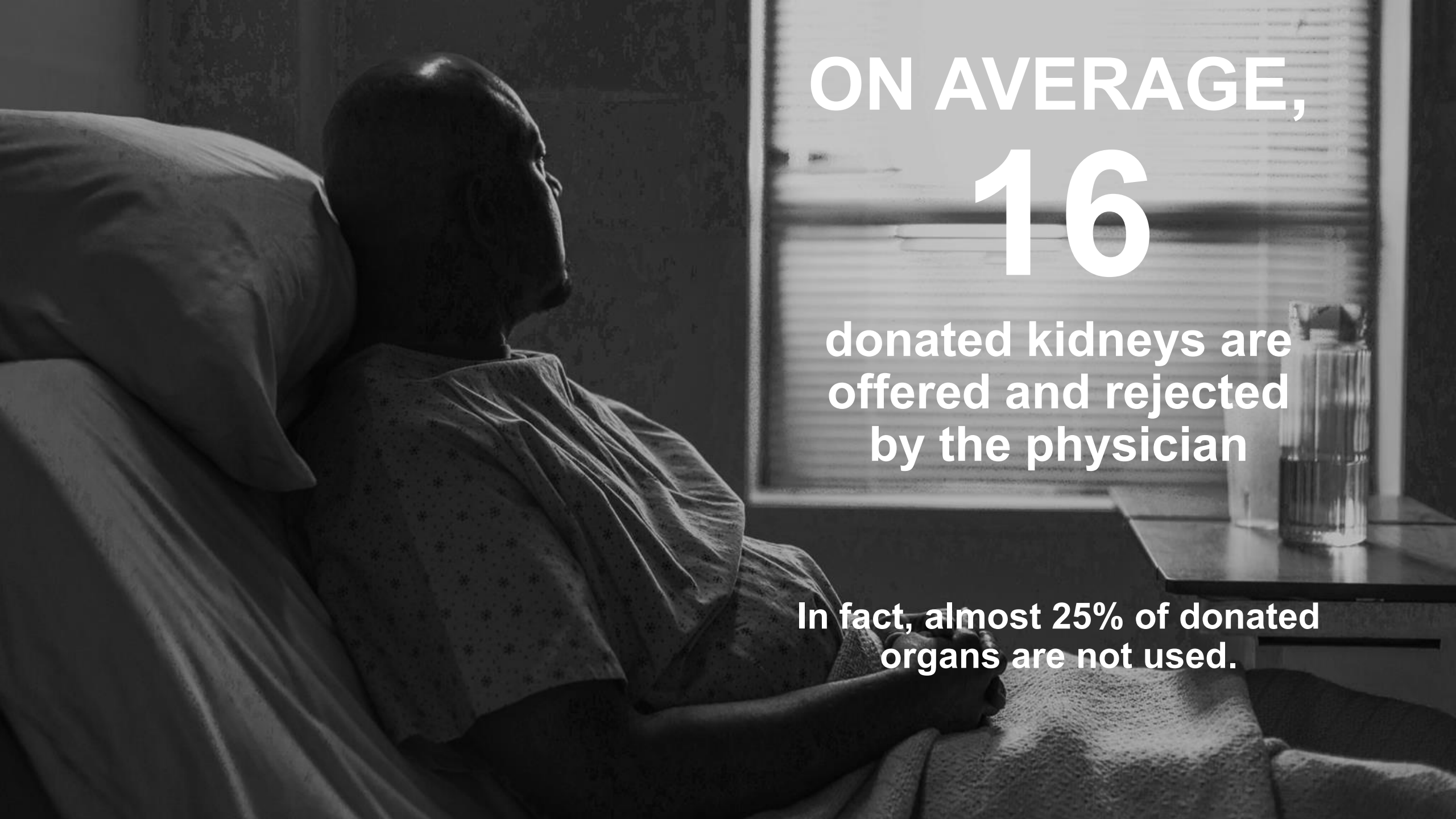
Email: donna.kivirauma@tuni.fi

http://organanalytics.com/

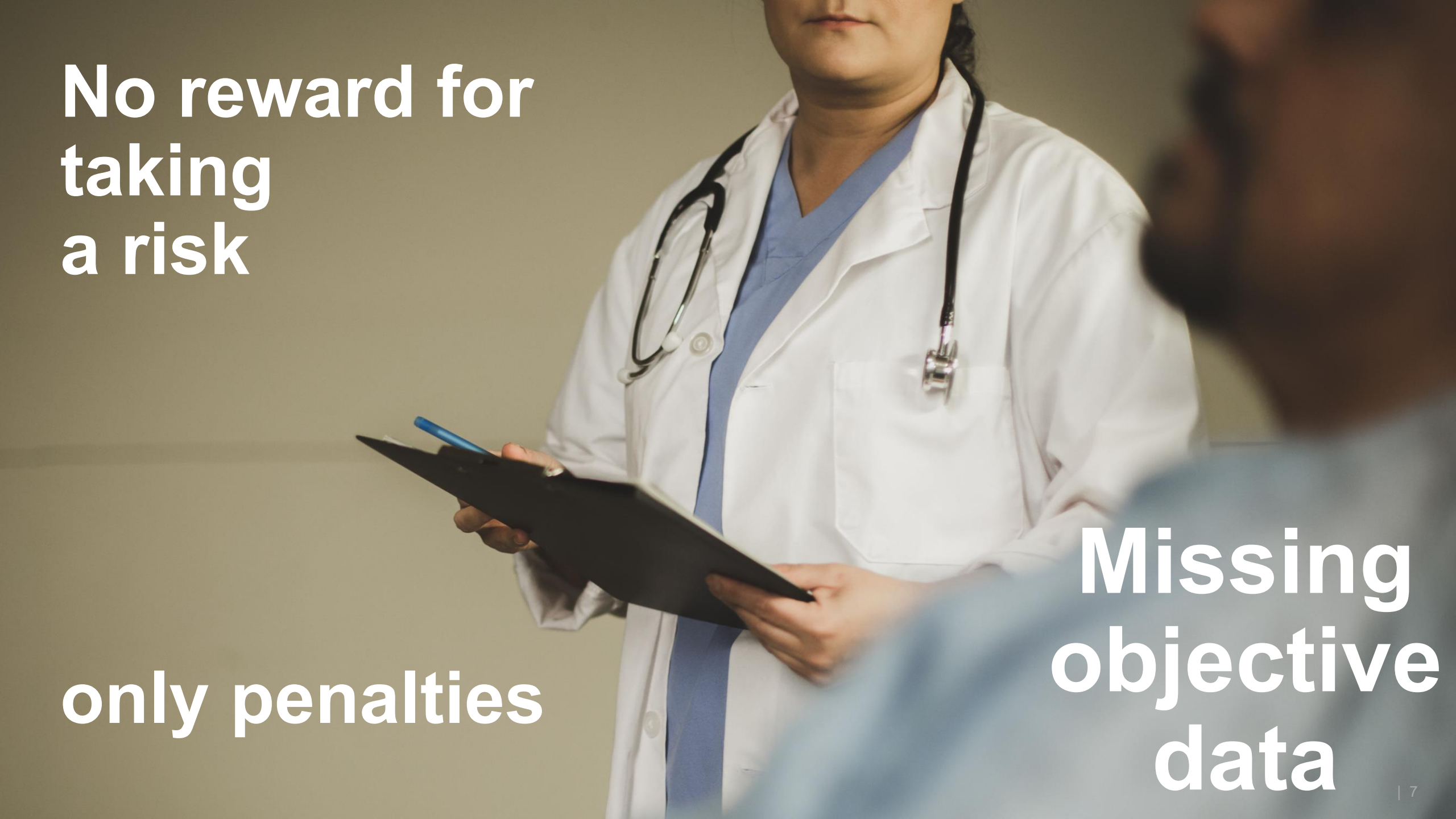

RIGHT NOW:
90,190
patients on the waiting list for a kidney
USA, March 2, 2025
National data - OPTN (hrsa.gov)


EVERY MONTH
+3,000
new patients
added to the list


EVERY DAY
13
patients die
while waiting


ON AVERAGE,
16
donated kidneys are offered and rejected by the physician
In fact, almost 25% of donated organs are not used.


ON AVERAGE,
16
donated kidneys are
offered and rejected
by the physician
WHY?
In fact, 25% of donated
kidneys are not used.


No reward for taking a risk
only penalties
Missing objective data

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OrganAnalytics

Reviving Hope, One Organ at a Time: Confidence in Every Decision

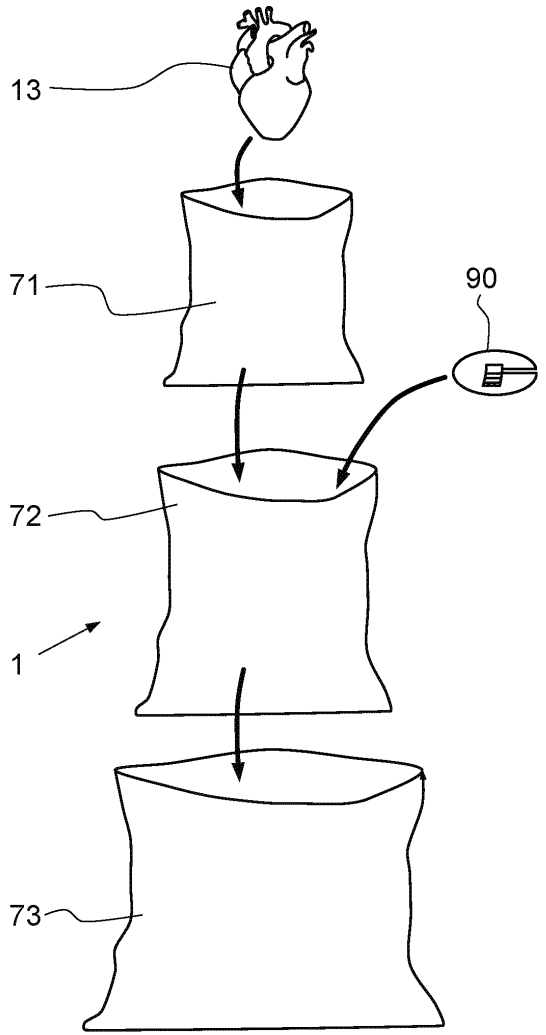
OrganAnalytics is developing technology that can assess the degradation of a transplant organ from procurement to implantation

OrganAnalytics Team Leader Dr. Jarno Tanskanen investigating a fresh porcine liver in our laboratory.

OrganAnalytics is developing a sensor technology that is non-invasive and provides real-time data about tissue degradation.

- Baseline measurement at procurement
- Continuous measurement during transport
- On-the-spot measurement in the implantation operating room

Our technology is expected to be a **Class IIa medical device** in the EU, and in the US, a **De Novo Breakthrough Device is indicated.**



A schematical illustration of one exemplary system for transporting organs by the organ container with a sensor (Fig. 11 of WO2024251504).

IP owned by Tampere University
IP transferable to an exploiting entity, e.g., a spin-off

Finnish Patent No. 131670

AN ORGAN CONTAINER, AN IMPEDANCE METER FOR THE ORGAN CONTAINER, AND A METHOD FOR DEFINING A DETERIORATION STATE OF AN ORGAN

- Patent granted September 4, 2025
- FI 131670 B1: https://patenttitietopalvelu.prh.fi/opendata/patent/document/2023/20235651/FI131670-B1-JULK.pdf

International PCT Patent Application No. PCT/EP2024/063790

WO2024251504 - AN ORGAN CONTAINER, AN IMPEDANCE METER FOR THE ORGAN CONTAINER, AND A METHOD FOR DEFINING A DETERIORATION STATE OF AN ORGAN

- Filed May 17, 2024
- Priority claimed from the Finnish patent application
- https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2024251504

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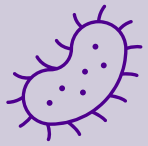
Currently Available Technology	OrganAnalytics Advantages
X Requires **invasive** procedures that cause damage to tissue	✓ **Non-contact**
or	✓ Electrical measurements with low amplitude excitation that have **no known harmful effects**
X Interpretation is highly **subjective**	✓ **Objective** data
X Tissue viability information is **not available in real-time**	✓ Degradation is **measured and information available in real-time and continuously,** also during transport
X **No degradation monitoring** in current organ preservation devices such as perfusion and cold storage devices	✓ Our technology can be realized as a **stand-alone device or integrated** into existing organ preservation devices such as perfusion devices

Where we are right now and where we are heading



Current State: TRL 3-4 (laboratory proof of concept using a porcine model)

Advancing to TRL 7 (prototype demonstrated in an operational environment) in two years

Approximately 3-5 years to an FDA approved medical device on the market

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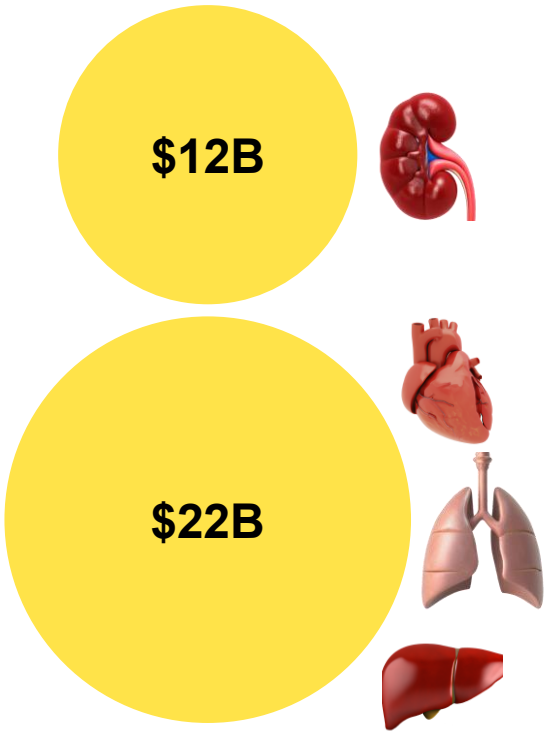
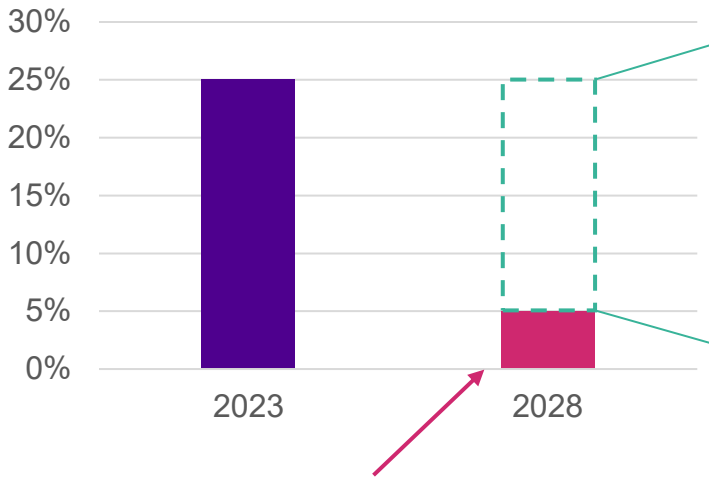
Our device can save lives… and help increase revenue for the US transplant business by $10B annually

Transplant business in USA



% of donated kidneys which are not used



***NASEM** (National Academies of Science, Engineering and Medicine) has set a goal that only 5% of organs should go unused by 2028

Organ Analytics' solution helps in reaching that goal

Our device can give the industry the objective data they need to have confidence in these organs

* https://nap.nationalacademies.org/catalog/26364/realizing-the-promise-of-equity-in-the-organ-transplantation-system

OrganAnalytics benefits to organ transplant stakeholders

Patient: Thousands more patients receive a **life-saving organ transplant** for better quality of life

Payor: Medicare can **save at least $1B annually** on kidney patient care*

Transplant Centers: Potential to **increase transplant business** in the US by **$10B**

* https://pharm.ucsf.edu/kidney/need/statistics

Go-To-Market Strategy

Phase I

License technology to an organ transport device manufacturer, e.g., Organ Recovery Systems, Xvivo, Paragonix, OrganOx.

We will select one so that we can get our technology through the FDA process and validated.

Phase II

Manufacture our own sensors/containers for organ transport device manufacturers outside the Phase I license coverage.

Revenue from licensing and sensors & containers and data systems to monitor the organs while in transport.

Phase III

Sensors and data systems for cold box transplant transports, also for low- and middle-income countries.

Explore other applications for our sensors, e.g., surgical applications, fish, sushi and meat monitoring.

Previous Grants & Short-term Funding Options (Not Mutually Exclusive)

OrganAnalytics Endeavor Funding – Past, Present and Future

OrganAnalytics –
Viability Analysis of Organ Transplants
Dr. Jarno Tanskanen

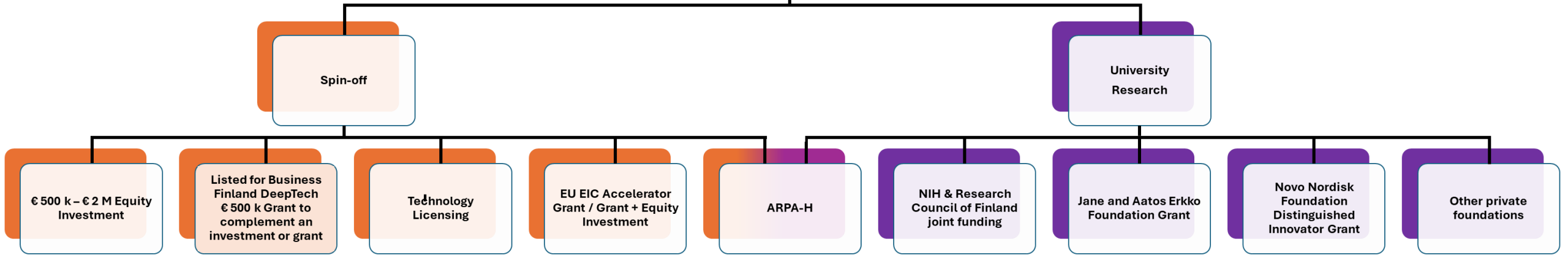
Business Finland R2B Grant
€ 795 k

1.8.2022–30.4.2024

ReOrgan –
Real-time Assessment of Organ Transplant Degradation Post-procurement
Prof. Jari Hyttinen

Novo Nordisk Foundation Distinguished Innovator Grant
DKK 4 M (~ € 536 k)

1.2.2024–30.4.2026
(Funds in use 1.5.2024-30.4.2026)



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External Advisors

Kevin Myer, M.Sc.

President and Chief Executive Officer
LifeGift, Texas, USA

(Earlier e.g., Business Director, United Network for Organ Sharing (UNOS), VA, USA)

Organ Sharing & Procurement Business Management

Alexander Spicer

M&A Associate
SERB Pharmaceuticals, France

Owner, Spicer & Spicer Ltd, UK

(Earlier e.g., Business Development and Licensing Director, Faron Pharmaceuticals Ltd, Finland)

Supporting Biotechnology Companies

Tampere University

Our Team

Jarno Tanskanen
Ass. Prof., D.Sc.
Team Leader

TechTour TOP PRESENTING COMPANY 2023

Donna Kivirauma
Business Champion

Best pitch award
Nordic Innovation Fair 2023, Copenhagen

Jari Hyttinen,
Prof., Ph.D.
Active Advisor

Mari Lehti-Polojärvi, D.Sc.
Experimentation Expert – Organs

Annika Ahtiainen, Ph.D.
Experimentation Expert – Tissue Engineering

Ilmari Tamminen, M.Sc.
Design Engineer

Sanna Halonen, M.Sc.
Sensor Engineer